SEO

Search Engine Optimization
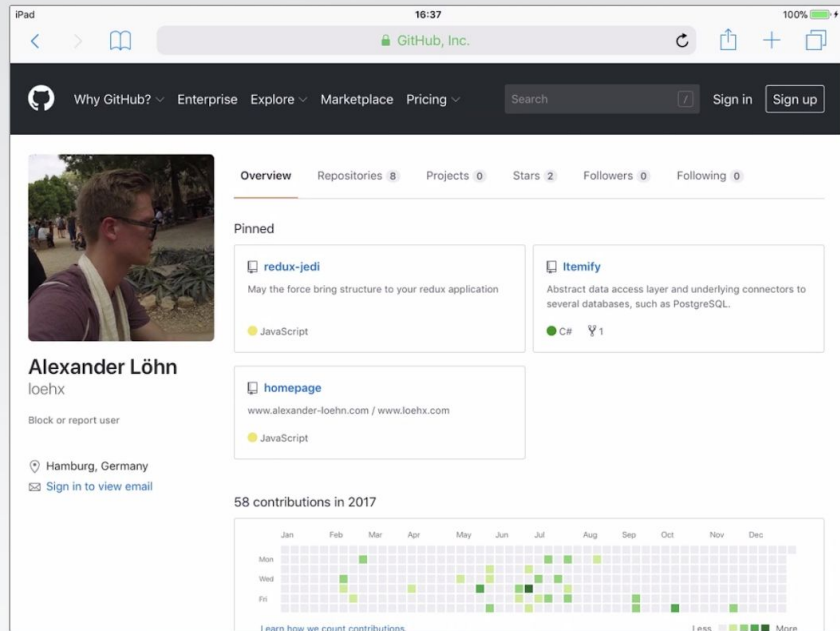
Introduction

What is SEO?

SEO ♡ HTML

#GoodToKnow

Review & Feedback

About me …

Backend Development *(server-side)*

Processing Data
Storing Data
Desktop Applications

C# .NET
Visual Basic .NET
MySQL
MSSQL

Frontend Development *(client-side)*

Websites
Webapps

HTML
CSS
JavaScript
Angular.js (v1)
React
Vue.js

Teaching *(just started)*

HTML
CSS
JavaScript
SEO
Hugo
…

Introduction

What is SEO? <- Let's go!

SEO ♡ HTML

#GoodToKnow

Review & Feedback

What is SEO?

★   Methods and Standards

★   Improve Ranking

★   Get More People on the Site   -> generate traffic!

statcounter
GlobalStats

Google	bing	Yahoo!	Baidu	YANDEX RU	DuckDuckGo
92.92%	2.38%	1.79%	1.03%	0.55%	0.38%

Search Engine Market Share Worldwide - February 2019

Google Eye Tracking Study

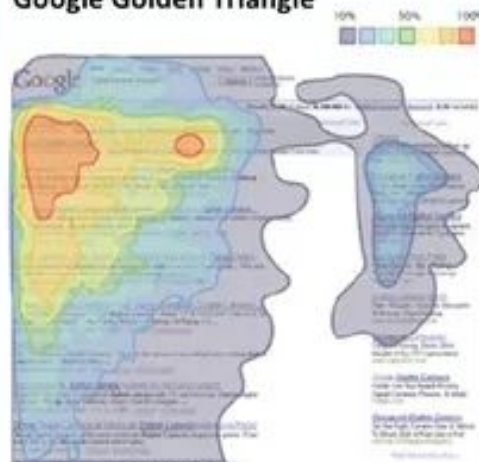| Organic Search Results Visibility	Pay Per Click Visibility
Viewed	**Viewed**
Position 1 – 100%	1 – 50%
Position 2 – 100%	2 – 40%
Position 3 – 100%	3 – 30%
Position 4 – 85%	4 – 20%
Position 5 – 60%	5 – 10%
Position 6 – 50%	6 – 10%
Position 7 – 50%	7 – 10%
Position 8 – 30%	8 – 10%
Position 9 – 30%	
Position 10 – 20%	

Source: Google Search Engine Results Eye Tracking Study, 2005, Enquiro Research

Google Golden Triangle

Tony Ly, http://www.linkedin.com/in/tonyly tly@nationalpositions.com

NationalPositions
Profitable Internet Marketing

How does the Ranking Work?

Popularity *(Traffic)*

The right **keyword** on the right spot *(Content Management)*

Web **integration** *how do I fit in? (Links + Backlinks)*

Technical criteria:

Machine Readability *-> for the love of BOTS ♡*

Completeness *-> SEO requirements*

Machine Readability

★ Simple and clean structure *<- throughout the website*

★ Sitemap *<- more on that later!*

★ Intuitive URLs

    ✗ `/seo?article=8473948`

    ✔ `/articles/seo/golden-triangle`

    ✔ `/articles/seo/Golden-Triangle/8473948` *AMAZON EXAMPLE ->*

Completeness

★ Title and description for all pages

★ *favicon* exists!

★ No 404 and no broken links!

★ Web accessibility ARIA standard

★ and more ...

SEO ♡ HTML

Crawling

Headings

Meta Information

Navigation

Image "Alt" Property

Aria Label Property

Exercise

SEO ♡ HTML

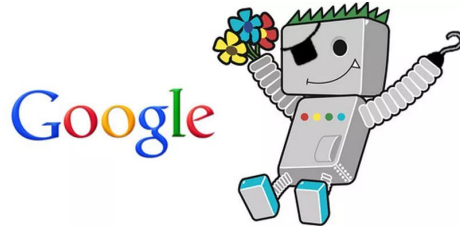Crawling   <- start

Headings

Meta Information

Navigation

Image "Alt" Property

Aria Label Property

Exercise

Bot?

Robot = (Web) Crawler = Spider

My job is to …

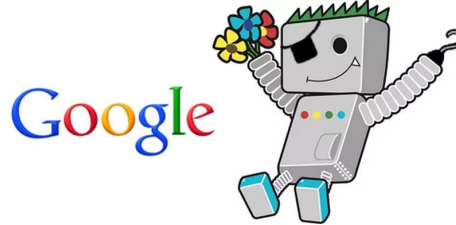Open a website
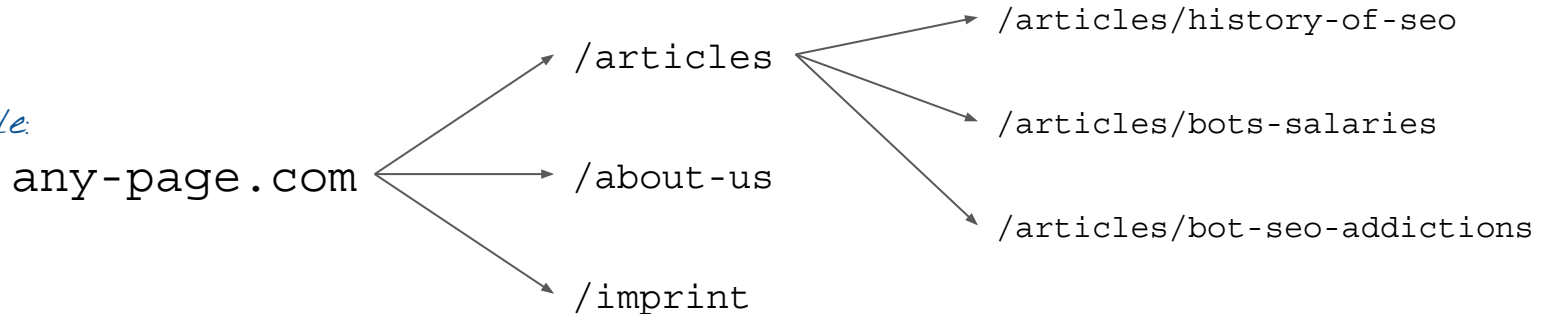⇩
Find all links
⇩
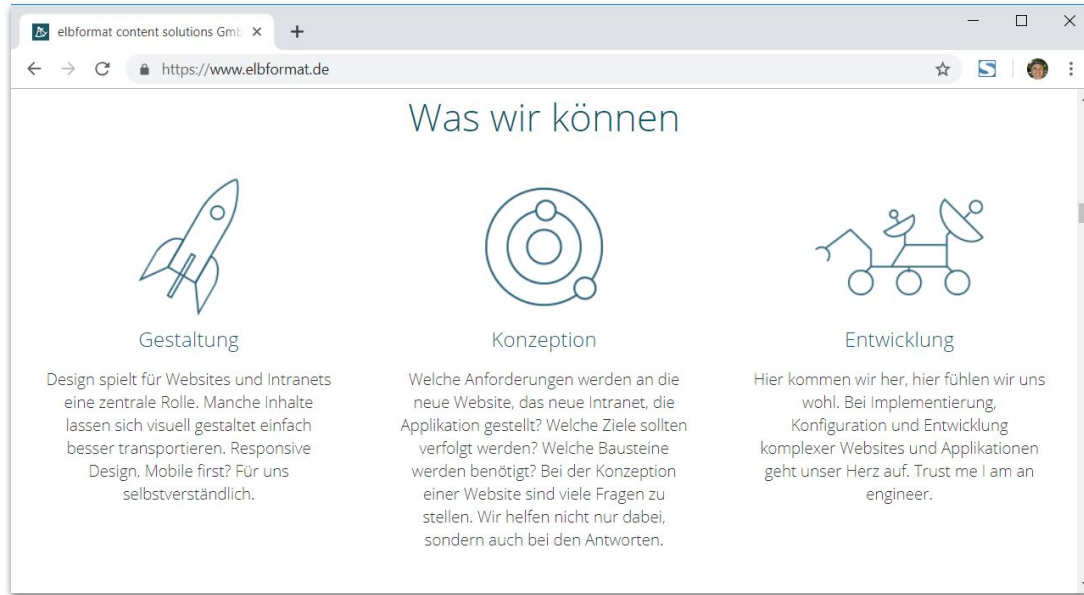Open them
⇩
Find all links
⇩
Open them
⇩
…

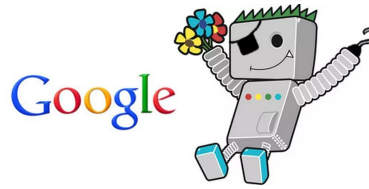A **Web crawler**, sometimes called a spider or spiderbot and often shortened to crawler, is an Internet bot that systematically browses the World Wide Web, typically for the purpose of Web indexing (web spidering).

(Source: https://en.wikipedia.org/wiki/Web_crawler)

Example:

any-page.com

/articles
/articles/history-of-seo
/articles/bots-salaries
/articles/bot-seo-addictions

/about-us

/imprint

...

Was wir können

Gestaltung
Design spielt für Websites und Intranets eine zentrale Rolle. …

Konzeption
Welche Anforderungen werden an die neue Website, …

Entwicklung
Hier kommen wir her, hier fühlen wir uns wohl. Bei Implementierung, …

https://www.elbformat.de/

4600 bytes (HTML) vs 740 (Text) bytes

SEO ♡ HTML

Crawling

Headings **<- next**

Meta Information

Navigation

Image "Alt" Property

Aria Label Property

Exercise

Headings

`<h1>`**Page Title**`</h1>`
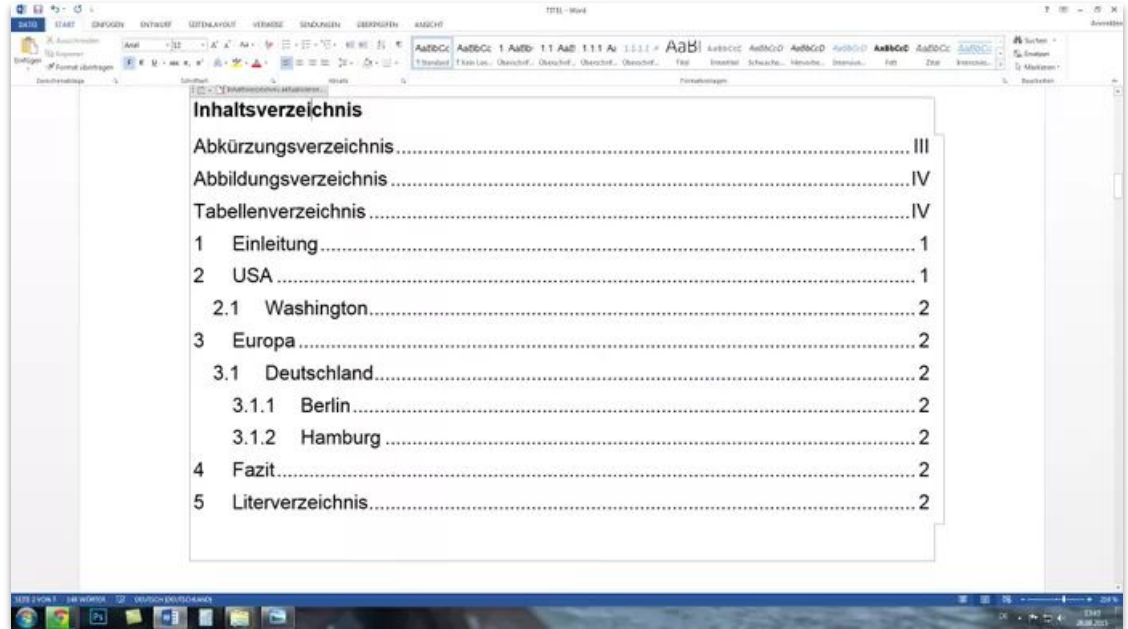
`<h2>`**Section**`</h2>`

`<h3>`**Article**`</h3>`

`<p>`Text`</p>`

`<h4>`**Chapter**`</h4>`

`<p>`Text`</p>`

Headings

```html
<h1>Page Title</h1>

<h2>Article</h2>

<p>Text</p>

<h3>Teaser</h3>

<p>Text</p>
```

```html
<h1>Article & Page Title</h1>

<p>Text</p>

<h3>Teaser</h3>

<p>Text</p>
```

Headings -> Dachzeile / Untertitel

IG METALL   JUGEND   MITGLIEDER   AKTIVE   PRESSE

IG METALL VOR ORT   METALLZEITUNG   KAMPAGNEN   SEMINARE   KARRIERE   ENGLISH

TARIF   IM BETRIEB   POLITIK & GESELLSCHAFT   MITMACHEN   SERVICE   ÜBER UNS

Mitglied werden →

IG Metall > Politik & Gesellschaft > Zukunft der Arbeit > Digitalisierung

Anmelden

h1 > span

h1

h2

DIGITALISIERUNG

Digital leben, digital arbeiten

Virtuelle Teams, mobiles Arbeiten: Die Digitalisierung verändert Arbeitswelt und Privatleben. Wie gestalten wir sie menschlich?

Digitalisierung - Digital leben, digital arbeiten

Headings -> Bootstrap

```
<h1 class="h2">Page Title</h1>

<h2 class="h3">Sub Title</h2>

<p>Text</p>
```

h1 semantic with h2 styling

SEO ♡ HTML

Crawling

Headings

Meta Information   <-

Navigation

Image "Alt" Property

Aria Label Property

Exercise

Meta Information

```
<?>
    <title>Invisible Title of the Website</title>
</?>



<html>
    <head>
        <title> … </title>
    </head>
    <body> … </body>
</html>
```

Meta Information

```
<head>                                            (max. 70 characters)
    <title>xStarters - deine Plattform für ...</title>
</head>
```


xStarters – deine Plattform für digitale soziale Ideen

https://xstarters.digital

Nimm teil an der xStarters Challenge für digital Natives von 14 bis 19 Jahren. Entwickelt im Team eine digitale soziale Idee, die unsere Welt ein wenig besser macht!

Meta Information

```html
<head>
    <title>xStarters - deine Plattform für ...</title>
    <meta name="description" content="Nimm Teil an der ..." />
</head>
```
(max. 160 characters)

xStarters – deine Plattform für digitale soziale Ideen

https://xstarters.digital

Nimm teil an der xStarters Challenge für digital Natives von 14 bis 19 Jahren. Entwickelt im Team eine digitale soziale Idee, die unsere Welt ein wenig besser macht!

Meta Information

```html
<head>
    <title>xStarters - deine Plattform für ...</title>
    <meta name="description" content="Nimm Teil an der ..." />
    <meta name="keywords" content="xStarters, digital, ..." />
</head>
```

OBSOLETE!!!

xStarters – deine Plattform für digitale soziale Ideen

https://xstarters.digital

Nimm teil an der xStarters Challenge für digital Natives von 14 bis 19 Jahren. Entwickelt im Team eine digitale soziale Idee, die unsere Welt ein wenig besser macht!

Meta Information

The Open Graph protocol

Open Graph is a technology first introduced by Facebook in 2010 that allows integration between Facebook and its user data and a website.

(Source: https://www.computerhope.com/jargon/o/open-graph.htm)

EXAMPLE ->

```
<meta property="og:locale" content="de_DE">
<meta property="og:type" content="article">
<meta property="og:title" content="xStarters – deine Plattform für digitale soziale Ideen">
<meta property="og:description" content="Nimm teil an der xStarters Challenge für digital
Natives von 14 bis 19 Jahren. Entwickelt im Team eine digitale soziale Idee, die unsere Welt
ein wenig besser macht!">
<meta property="og:image" content="/uploads/media/720x/07/17-preise-intro.jpg?v=1-0">
<meta property="og:site_name" content="www.xstarters.digital">
```

SEO ♡ HTML

Crawling

Headings

Meta Information

Navigation <- here

Image "Alt" Property

Aria Label Property

Exercise

xStarters – deine Plattform für

https://xstarters.digital

xStarters

Über xStarters

Events

Blog

Challenge

Lehrerinnen & Lehrer

IMPRESSUM

DATENSCHUTZ

COOKIE-RICHTLINIEN

ALLGEMEINE NUTZUNGSBEDINGUNGEN

LIZENZHINWEISE DRITTER

KONTAKT

SEO ♡ HTML

Crawling

Headings

Meta Information

Navigation

Image "Alt" Property   <- here

Aria Label Property

Exercise

Image "Alt" Property
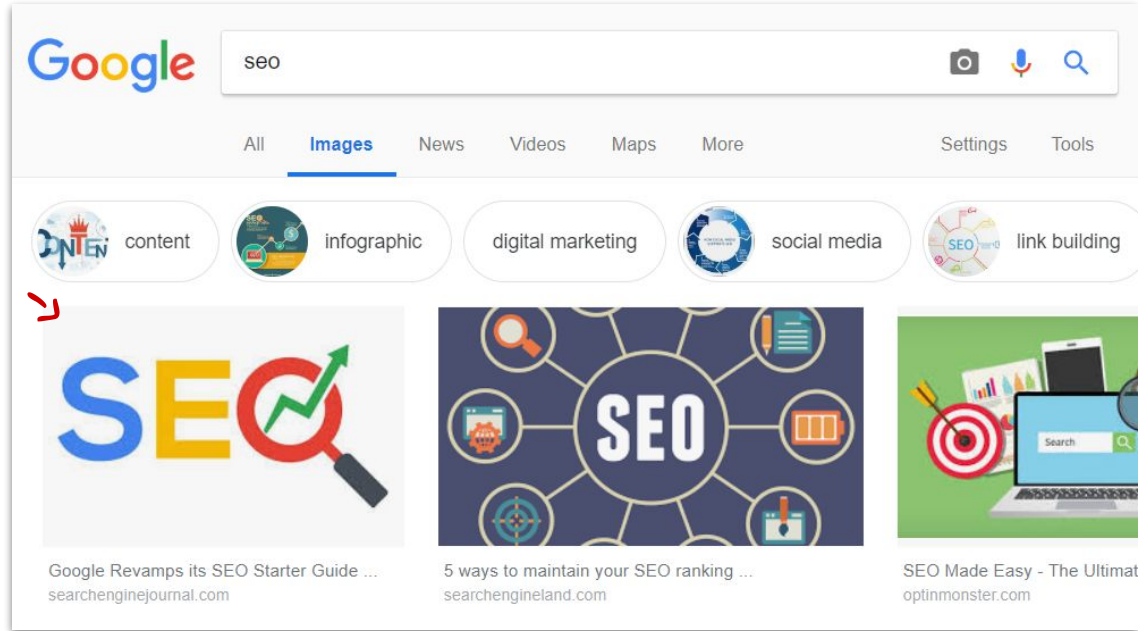
IMAGE SEO

Google →

SEO ♡ HTML

Crawling

Headings

Meta Information

Navigation

Image "Alt" Property

Aria Label Property <- here

Exercise

Aria Label Property

WAI-ARIA

(Web Accessibility Initiative - Accessible Rich Internet Applications)

```
<a href="…" aria-label="Find out more about this topic">     ♡ SCREENREADER
    mehr
</a>


<button aria-label="Close" onclick="myDialog.close()">
    X
</button>
```

Alternative :
```
<button title="Close" ...>
    X
</button>
```

SEO ♡ HTML

Crawling

Headings

Meta Information

Navigation

Image "Alt" Property

Aria Label Property

Exercise ← let's go

getlorem.com
(generate placeholder text)

htmlburger.com

HTML BURGER

HOME   SERVICES ⌄   ABOUT   SAMPLES   FOR AGENCIES   REVIEWS   LABS   ORDER NOW

AGENCY-TO-AGENCY

CODING SERVICE

Exercise II

undp.org/content/undp/en/home/sustainable-development-goals/goal-1-no-poverty.html
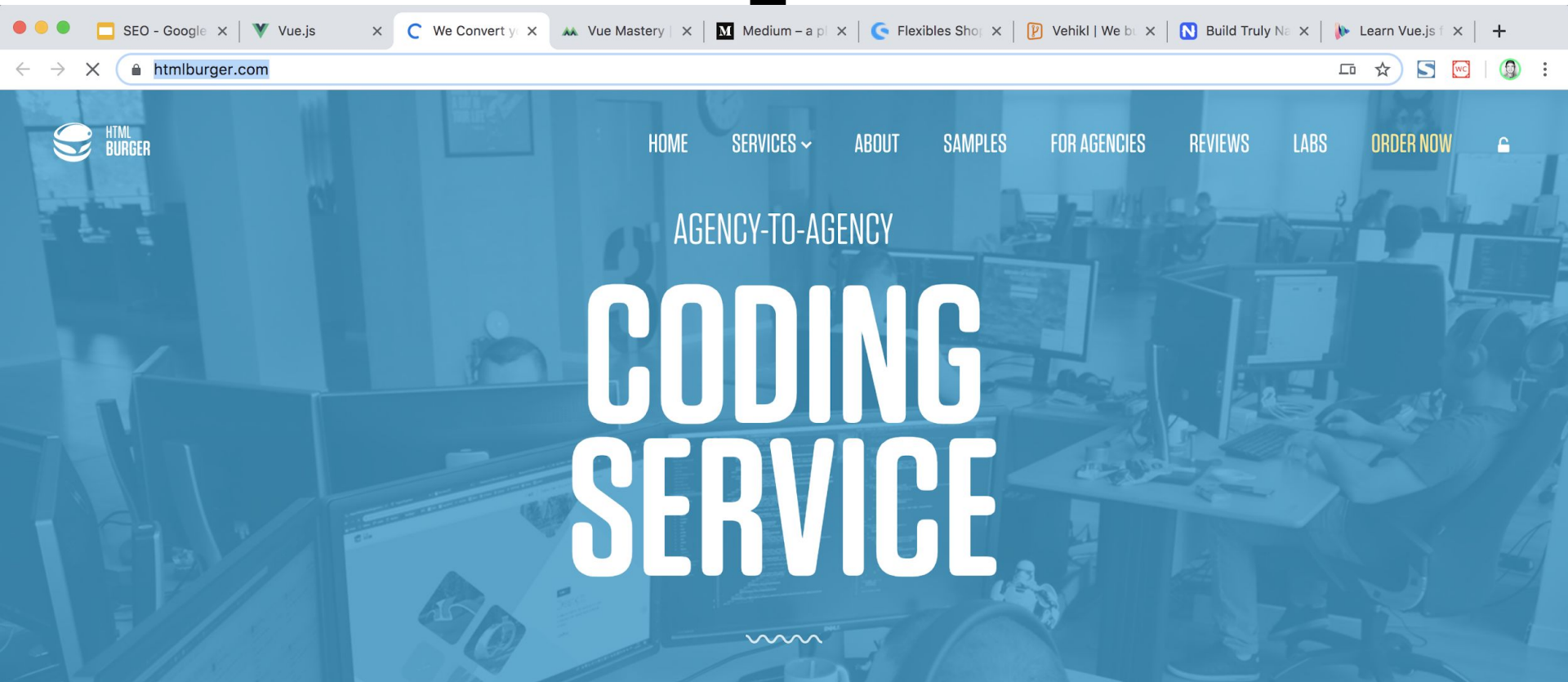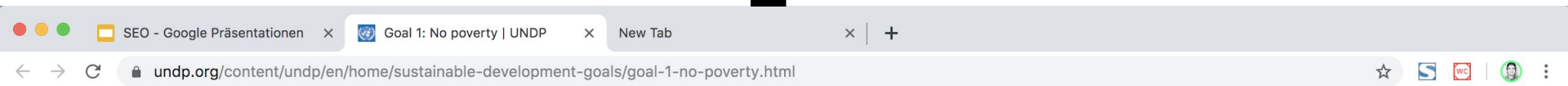
English | Español | Français   Around the world

United Nations Development Programme

SUSTAINABLE DEVELOPMENT GOALS   OUR FOCUS   MORE   DONATE

Goals in action

SAHEL A REGION OF OPPORTUNITIES

Harnessing potential, talent, and energy.

more ›
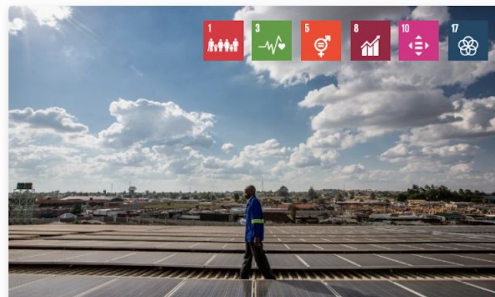
WIDENING INEQUALITY; A UNIVERSAL ISSUE

How the unprecedented gap between the haves and have nots stands in the way of a

BUILDING EQUALITY ON THE ROOF OF THE WORLD

A lack of running water has adversely affected the lives of women and girls in a

Exercise III

SEO - Google Präsentationen ✕   **Official Homepage of Faber-Ca** ✕   +

🔒 Faber-Castell Aktiengesellschaft [DE] | faber-castell.com
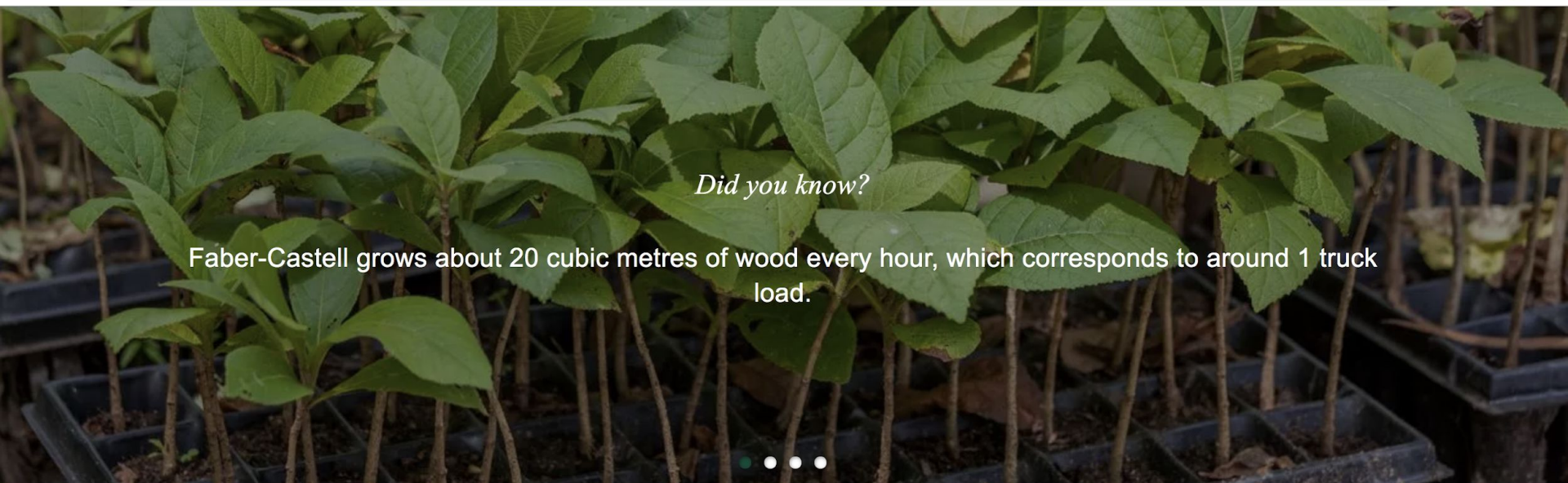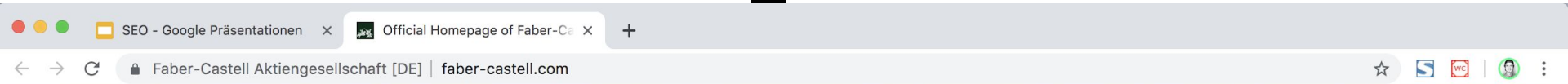
Did you know?

Faber-Castell grows about 20 cubic metres of wood every hour, which corresponds to around 1 truck load.

● ○ ○ ○

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Tips, tutorials and inspiration in social media

f   🐦   📷   ▶   📌

Store Locator

Find a store close to you

Store Locator

Introduction

What is SEO?

SEO ♡ HTML

#GoodToKnow <- we're here!

Review & Feedback

#GoodToKnow

/sitemap.xml <-

/robots.txt

Recrawl

Google Trends
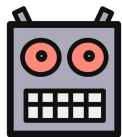
♡ Sitemap

The **Sitemaps protocol** allows a webmaster to inform search engines about URLs on a website that are available for crawling

(Source: https://en.wikipedia.org/wiki/Sitemaps)

```xml
<urlset xmlns="http://www.sitemaps.org/schemas/sitemap/0.9" xmlns:xhtml="http://www.w3.org/1999/xhtml">
▼<url>
    <loc>https://xstarters.digital/aboutus</loc>
    <lastmod>2019-03-06</lastmod>
    <xhtml:link rel="alternate" hreflang="de" href="https://xstarters.digital/aboutus"></xhtml:link>
    <xhtml:link rel="alternate" hreflang="x-default" href="https://xstarters.digital/aboutus"></xhtml:link>
  </url>
▶<url>…</url>
▶<url>…</url>
▶<url>…</url>
▶<url> </url>
```

Examples?

www.xml-sitemaps.com *or by a CMS plugin*

#GoodToKnow

/sitemap.xml

/robots.txt ←

Recrawl

Google Trends
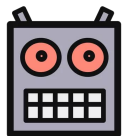
♡ robots.txt


```
www.robotstxt.org/robots.txt        ×    +                    —   □   ×

←  →  C   ⓘ Not secure | www.robotstxt.org/robots.txt   ☆   S  | 👤  ↑

User-agent: *
Disallow:

# too many repeated hits, too quick
User-agent: litefinder
Disallow: /

# Yahoo. too many repeated hits, too quick
User-agent: Slurp
Disallow: /

# too many repeated hits, too quick
User-agent: Baidu
Disallow: /
```

The **robots exclusion standard**, … is a standard used by websites to communicate with web crawlers and other web robots.

(Source: https://en.wikipedia.org/wiki/Robots_exclusion_standard)

Example →

#GoodToKnow

/sitemap.xml

/robots.txt

Recrawl ←

Google Trends

Ask Google to recrawl your URLs

If you've recently added or made changes to a page on your site, you can ask Google to (re)index it using any of the methods listed here.

General guidelines

- **Crawling** can take anywhere from a few days to a few weeks. Be patient and monitor progress using either the Index Status report or the URL Inspection tool.
- All methods described here have about the same response time.
- There is a quota for submitting individual URLs.
- Requesting a recrawl multiple times for the same URL or sitemap won't get it crawled any faster.

Crawl request methods

Use the URL Inspection tool   ⌄

Submit a sitemap   ⌄

#GoodToKnow

/sitemap.xml

/robots.txt

Recrawl

Google Trends ←

seo
Suchbegriff

+ Vergleichen
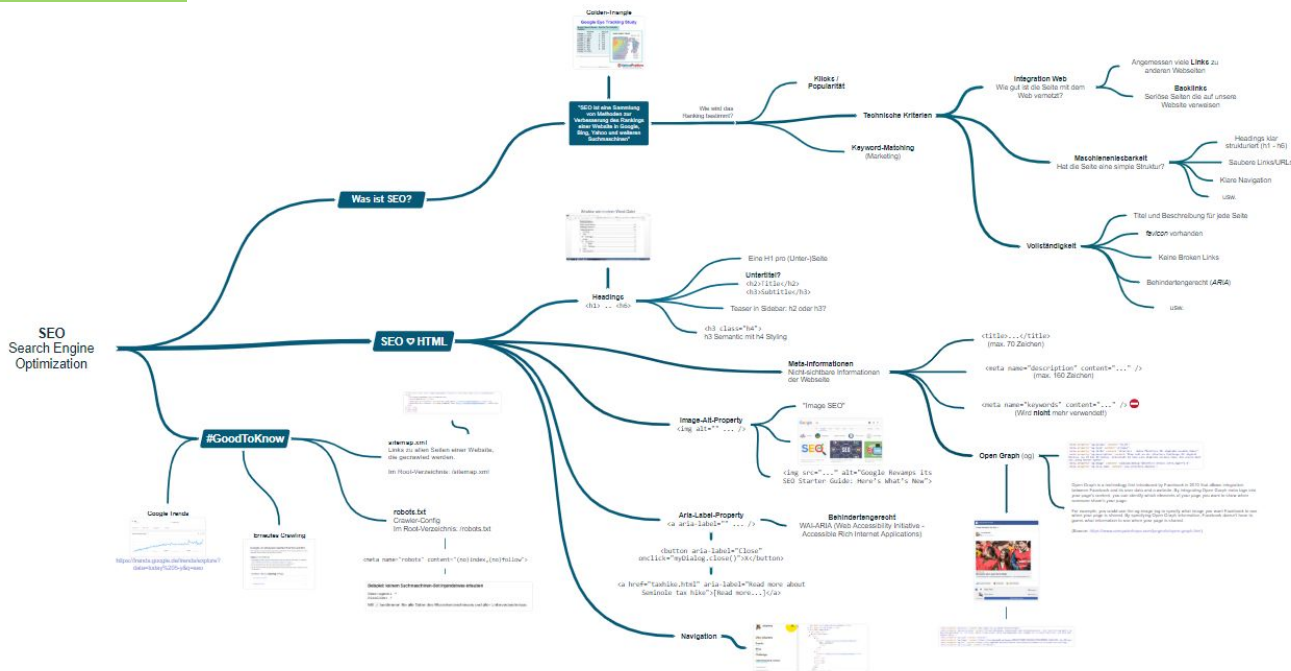
Weltweit ▾   Letzte 5 Jahre ▾   Alle Kategorien ▾   Websuche ▾

Interesse im zeitlichen Verlauf ⍰

100

75

50

25

Hinweis

16.03.2014   30.08.2015   12.02.2017   29.07.2018
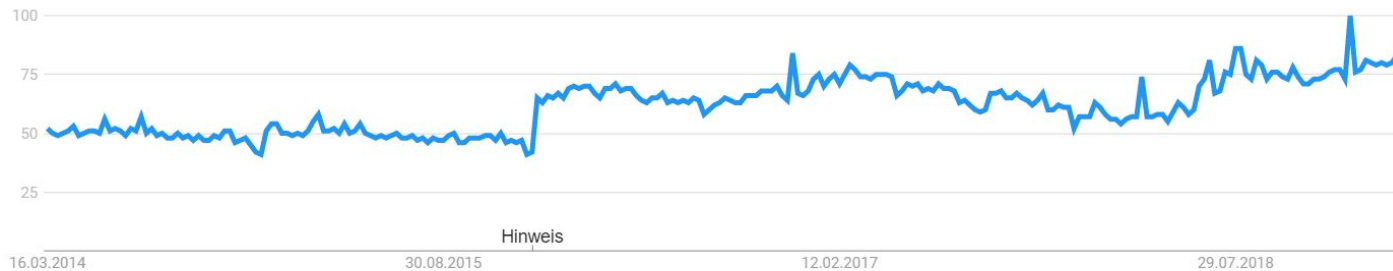
Google Trends ->

Googles point of view

SEO
Search Engine
Optimization

Was ist SEO?

"SEO ist eine Sammlung von Methoden zur Verbesserung des Rankings einer Website in Google, Bing, Yahoo und anderen Suchmaschinen"

Wie wird das Ranking bestimmt?

Klicks / Popularität

Keyword-Matching (Marketing)

Technische Kriterien

Integration Web
Wie gut ist die Seite mit dem Web vernetzt?

Angemessen viele Links zu anderen Webseiten

Backlinks
Seriöse Seiten die auf unsere Website verweisen

Maschinenlesbarkeit
Hat die Seite eine simple Struktur?

Headings klar strukturiert (h1 - h6)

Saubere Links/URLs

Klare Navigation

usw.

Vollständigkeit

Titel und Beschreibung für jede Seite

favicon vorhanden

Keine Broken Links

Behindertengerecht (ARIA)

usw.

Golden-Triangle
Google Eye Tracking Study

SEO ♡ HTML

Headings
(h1 ... h6)

Eine H1 pro (Unter-)Seite

Untertitel?
<h2>Titel</h2>
<h3>Subtitle</h3>

Teaser in Sidebar: h2 oder h3?

<h3 class="h4">
h3 Semantic mit h4 Styling

Meta-Informationen
Nicht-sichtbare Informationen der Webseite

<title>...</title>
(max. 70 Zeichen)

<meta name="description" content="..." />
(max. 160 Zeichen)

<meta name="keywords" content="..." />
(Wird nicht mehr verwendet!)

Image-Alt-Property

"Image SEO"

<img src="..." alt="Google Revamps its SEO Starter Guide: Here's What's New">

Open Graph (og)

Aria-Label-Property
<a aria-label="" ... />

Behindertengerecht
WAI-ARIA (Web Accessibility Initiative - Accessible Rich Internet Applications)

<button aria-label="Close" onclick="myDialog.close()">x</button>

[Read more...]

Navigation

#GoodToKnow

sitemap.xml
Links zu allen Seiten einer Website, die gecrawled werden.
Im Root-Verzeichnis: /sitemap.xml

robots.txt
Crawler-Config
Im Root-Verzeichnis: /robots.txt

<meta name="robots" content="(no)index,(no)follow">

Google Trends

Immutable Crawling

Introduction

What is SEO?

SEO ♡ HTML

#GoodToKnow

-> Review & Feedback <-

Thank you!

SEO

Search Engine Optimization